

A STUDY ON THE ACCESS TO AGRICULTURAL INPUT SUBSIDIES AMONG FARMERS IN TAMIL NADU

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ABSTRACT

Agricultural input subsidies are potential ways of incentivizing farmers to purchase inputs that they were unable and/or unwilling to obtain at market rates. Subsidies have occupied the concerns of agricultural economists for a long time because they are pervasive in agriculture, even though they are often applied in ways that benefit mostly richer farmers, causing inefficiencies, leading to a heavy fiscal burden, distort trade and negative environmental effects. The results revealed that 50.94 per cent of the sample respondents perceived the benefits of agricultural subsidies at low level followed by moderate level (30.62 %) and high level (18.44 %). It was also found that there exists greater inequality in access to agricultural input subsidies across the farm size groups and agro- climatic zones of Tamil Nadu. Therefore, it is recommended that the respective authorities and extension agents should create awareness about the availability of subsidies and make them to use these subsidies in an efficient way. Therefore, agricultural input subsidy programmes should be transparent and combined with credit support programmes that can allow farmers really benefit from subsidy programmes.

KEYWORDS: *Agricultural Input Subsidies, Inequality & Farm Size*

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INTRODUCTION

A progressive agriculture serves as a powerful engine of economic growth and development of any country. In a country like India, adoption of new agricultural technology was costly when compared with the traditional methods of cultivation. For stimulating agricultural growth, the government of India provides various incentives together with price supporting programmes. Among the agriculture production incentives, subsidies are considered to be the most powerful instruments for accelerating the growth of agricultural production, which are designed to compensate the high cost of production and to stimulate the use of modern inputs and technologies. On the recommendations of Jha Committee (Food grain price committee), the scheme of subsidies was started by Government of India on the purchase of various agriculture inputs to facilitate farmers.

The input subsidies are particularly useful where the farmers are reluctantly avoiding such input due to higher cost. Moreover, farm subsidies encourage and help the poor farmers to apply the recommended quantity of expensive inputs at lower costs, resulting in high crop productivity. The subsidies granted for fertilizers, irrigation and power as subsidies on non-merit economic services is to help the farmers to reduce the production cost. But the fact is that large farmers are getting more benefits from these subsidies than that of small farmers, who already have the capacity to purchase the inputs.

The rationale behind the subsidies depends on the fact that they should be distributed equally among the regions and farmers for attaining the objective of rapid growth in agricultural production. But there has been large inter regional and inter farm disparity in the use of agricultural input subsidies, which has relatively increased over the time periods. Hence, the proposed research aims to examine the inequality in access to various agricultural input subsidies among different classes of farmers.

REVIEW OF LITERATURE

Gulati and Sharma, (1995) revealed that the benefits of agricultural subsidies were concentrated only on certain types of farmers in few regions cultivating irrigated crops. Highly subsidized prices of inputs such as fertilizer, irrigation and electricity had promoted the cultivation of water- intensive crops.

Dubash and Rajan, (2001) argued that the benefits from the subsidies were not equally distributed and large farmers had received higher amount of subsidy when compared with marginal and small farmers. They also recommended that extensive policy and institutional reforms were required to deal with the problems of irrigation subsidy and to impute their quantum, problems of equity and impact on the environment

La Vina, (2006) found that the distribution of agricultural support programmes were uneven and significantly skewed towards large farmers and agribusiness with capital- intensive, highly mechanized operations on vast commercial estates rather than marginal and small farmers who were considered as poor by developed country standards.

Sharma and Thaker (2009) examined the benefits from fertilizer subsidy and found that in most of the states these subsidies were heavily inclined towards the large farmers growing water – intensive crops like rice, cotton, sugarcane and wheat. They also recommended providing nutrient based pricing policy rather than product pricing regime for fertilizers so as to ensure balanced application of nutrients and growth of fertilizer producing industries.

Bardhan and Mookherjee (2011) found that minikits provided by the local authorities and Extension agents had a huge impact on productivity in West Bengal, sharing 17%, 16% and 8% respectively to the growth productivity study periods of 1982-85, 1986-90, 1991-95. The issue of minikits showed no significant impact on cropping patterns, indicating that they were effectual by increasing yield of crops. The benefits were enjoyed by all size classes of farm holding and increased agricultural incomes of hired workers lesser than farm incomes.

Ajah and Nmadu (2012) examined the access to farm inputs by small- scale maize farmers in Abuja and accord that the existence of differential access to productive resources hinders farmer's participation in agricultural development which often reduce both productivity on the farms and the overall expansion of the agricultural sector. They also recommended that input and farm information Service centres should be established under a Public Private Partnership to increase farmer's access to inputs.

Singh (2015) studied that agricultural subsidy system in India had resulted in misallocation of resources, which reduces India's ability to meet out the future food demand. He also found that subsidies resulted in detrimental environmental impacts due to resource overuse notably, groundwater extraction. He recommended implementing a new policy to create incentives for farmers to adopt more efficient practices so as to prevent further degradation and promote efficient input usage.

From the above reviews, it is evident that agricultural subsidies create lopsided incentive systems thereby contributing for unequal distribution of its welfare impacts.

RESEARCH GAP

From the above review of literature, it is clear that past studies were done on the importance of agricultural subsidies, its utilization and impact on production. But, there was hardly any research done on identifying the equity implications of agricultural subsidies under Indian context. Hence, the present paper address the issue of inequality in access to subsidies among different categories of farmers.

METHODOLOGY

The study was carried out in 4 Agro- Climatic Zones of Tamil Nadu namely, Western Zone, North Eastern Zone, Cauvery Delta Zone, Western Zone. Two highly subsidized district each from two Agro- Climatic Zones and two least subsidized districts from another two Agro- Climatic Zones were selected based on the preliminary data gathered from Agriculture Directorate, Chennai.

The respondent farmers were selected for the study using multi- stage random sampling method. Two blocks from each district were randomly selected for the study. The data are gathered from 320 respondent farmers through pre- tested and structured questionnaire.

The percentage analysis was done to know the socio-economic status of the respondent farmers, their land holdings and benefits of agricultural input subsidies of respondent farmers. ANOVA (Analysis of Variance) was calculated to find out the inequality in access to total agricultural subsidies across farm size groups across four agro-climatic zones.

RESULTS AND DISCUSSIONS

Socio- Economic Characteristics of the Respondent Farmers

The Socio- economic status of respondent farmers was analyzed and the results are presented in *Table 1*. It was observed that 33.44 per cent of the respondents were in the age group of above 50 years followed by 41 to 50 years (29.69 %), 31 to 40 years (29.37 %) and less than 30 years (7.50 %).

Table 1: Socio- Economic Status of Sample Respondents

Socio- Economic Status	Number of Respondents	Percentage
Age Group		
< 30 Years	24	7.50
31 – 40 Years	94	29.37
41 – 50 Years	95	29.69
>50 Years	108	33.44
Education		
Illiterate	45	14.06
Primary	127	39.69
Secondary	79	24.69
Higher Secondary	41	12.81
Graduation	28	8.75
Land Holdings		
Marginal	126	39.38
Small	102	31.88

Table 1: Contd.,		
Medium	66	20.63
Large	26	8.13

The results showed that 39.69 per cent of the farmer respondents have primary education followed by secondary education (24.69 %), illiterate (14.06 %), higher secondary (12.81 %), and graduation (8.75 %). It was observed that 39.38 per cent of the respondents were marginal land holders followed by small (31.88 %), medium (20.63 %) and large (8.13 %) farmers.

Benefits of Agricultural Input Subsidies for Sample Farmers

The benefits of agricultural input subsidies for sample farmers were analyzed and the results are presented in Table 2. The results showed that 43.75 per cent of respondent farmers strongly agreed with subsidies as a way to ensure cheap inputs to agriculture followed by agree (35.63 %), neutral (12.19 %), disagree (4.69 %) and strongly disagree (3.75 %). It is clear that 47.19 per cent of respondent farmers agreed that subsidies stabilize the price of inputs followed by neutral (23.44 %), strongly agree (17.50 %), disagree (7.19 %) and strongly disagree (4.69 %).

Table 2: Benefits of Agricultural Input Subsidies for Respondents

Benefits of Agricultural Input Subsidies	Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree	Total
Ensure Cheap inputs to agriculture	140 (43.75)	114 (35.63)	39 (12.19)	15 (4.69)	12 (3.75)	320 (100.00)
Stabilize the price of inputs	56 (17.50)	151 (47.19)	75 (23.44)	23 (7.19)	15 (4.69)	320 (100.00)
Ensure availability of inputs for agricultural operations	124 (38.75)	122 (38.13)	46 (14.38)	13 (4.06)	15 (4.69)	320 (100.00)
Reduce cost of production	112 (35.00)	115 (35.94)	54 (16.88)	19 (5.94)	20 (6.25)	320 (100.00)
Reduce the need to borrow	56 (17.50)	105 (32.81)	84 (26.25)	65 (20.31)	10 (3.13)	320 (100.00)
Enhance consumption and savings	104 (32.50)	96 (30.00)	68 (21.25)	30 (9.38)	22 (6.88)	320 (100.00)
Provide security to farmers	113 (35.31)	126 (39.38)	17 (5.31)	29 (9.06)	35 (10.94)	320 (100.00)

(The figures in the parentheses are percentage to total)

The results indicated that 38.75 per cent of respondent farmers strongly agreed that subsidies ensure availability of inputs for agricultural operations followed by agree (38.13 %), neutral (14.38 %), strongly disagree (4.69 %) and disagree (4.06 %). It is observed that 35.94 per cent of respondent farmers agreed with subsidies reduce cost of production followed by strongly agree (35.00 %), neutral (16.88 %), strongly disagree (6.25 %) and disagree (5.94 %).

The results revealed that 32.81 per cent of respondent farmers agreed with subsidies reduce the need to borrow followed by neutral (26.25 %), disagree (20.31 %), strongly agree (17.50 %) and strongly disagree (3.13 %). It is apparent that 32.50 per cent of respondent farmers are strongly agreed with subsidies enhance consumption and savings followed by agree (30.00 %), neutral (21.25 %), disagree (9.38 %) and strongly disagree (6.88 %).

The results implied that 39.38 per cent of respondent farmers agreed with subsidies provide security to farmers followed by strongly agree (35.31), strongly disagree (10.94 %), disagree (9.06 %) and neutral (5.31 %).

Access to Total Input Subsidies in Tamil Nadu

Total input subsidies include all the agricultural input subsidies provided by both the central government and state government. It helps the farmers in improving their production decision and technology adoption at the farm level. It also ensures the farmer in improving their standard of living.

From the *Table 3*, it is clear that across the farm size groups, the mean total input subsidies per hectare is high among large farmers (Rs. 8252.42/ha) followed by medium farmers (Rs. 6874.75/ha), small farmers (Rs. 5918.55/ha) and marginal farmers (Rs. 5150.89/ha). The variation within the Western Zone is high (35.47 %) followed by North Eastern Zone (15.11 %), Cauvery Delta Zone (13.44 %) and Southern Zone (10.58 %).

The F-value of 5.69 calculated using a 2-way ANOVA is significant at 1 per cent, showing that there occurs inequality in access to total subsidies across farm size groups.

Table 3: Access to Total Input Subsidies in Tamil Nadu

Across Farm Size	Mean (Rs./ha)	Standard Deviation	Co- Efficient of Variation (%)	F- Value
Marginal	5150.89	843.28	16.37	5.69**
Small	5918.55	1282.41	21.67	
Medium	6874.75	1886.35	27.44	
Large	8252.42	2988.95	36.22	
Across Zone				
WZ	8372.25	2969.46	35.47	8.82***
NEZ	7277.77	1099.87	15.11	
CDZ	6047.87	812.58	13.44	
SZ	4498.72	475.94	10.58	

Note: ***Significant at 1 per cent level, **- Significant at 5 per cent level.

Across the Zone, the mean total input subsidies per hectare is high in Western Zone (Rs. 8372.25/ha) followed by North Eastern Zone (Rs. 7277.77/ha), Cauvery Delta Zone (Rs. 6047.87/ha) and Southern Zone (Rs. 4498.72/ ha). The variation within the Zone is high in Western Zone (35.47 %) followed by North Eastern Zone (15.11 %), Cauvery Delta Zone (13.44 %) and Southern Zone (10.58 %).

The F-value of 8.82 calculated using a 2-way ANOVA is highly significant ensuring that there exists greater inequality in access to total input subsidies across the zones.

The inequality in access to various farm input subsidies among different size classes of farmers may be due to illiteracy, lack of knowledge about the subsidies, lengthy application process and non- availability of timely credit.

CONCLUSIONS

The findings revealed that 39.38 per cent of the respondents were marginal land holders followed by small (31.88 %), medium and large farmers. The results revealed that 50.94 per cent of the sample respondents perceived that agricultural subsidies were at the lowest level followed by moderate level and high level. In all the four zones of Tamil Nadu taken under study, the marginal and small farmers were the least benefited from the agricultural input subsidies while the lion's share of agricultural input subsidies were benefitted by the medium and large sized farmers.

POLICY IMPLICATIONS

The agricultural input subsidy programmes should be transparent and combined with credit support programmes that can allow farmers really benefit from subsidy programmes. It should be reorganized to comprise Farmer Based Organizations [FBOs] as a major distribution channel for subsidized agricultural inputs to farmers.

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